

(No Model.)

C. S. WRIGHT.

ATTACHMENT FOR WELL DRILLING MACHINES.

No. 600,189.

Patented Mar. 8, 1898.

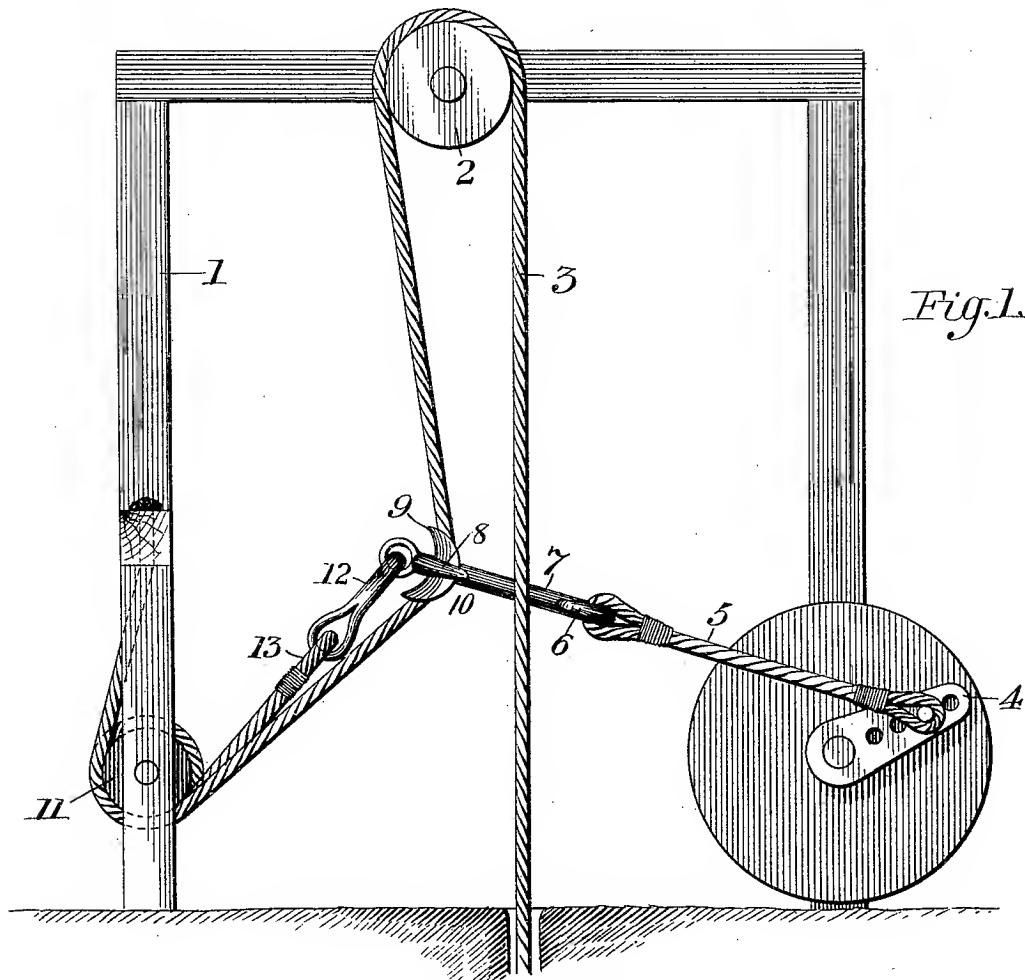


Fig. 1.

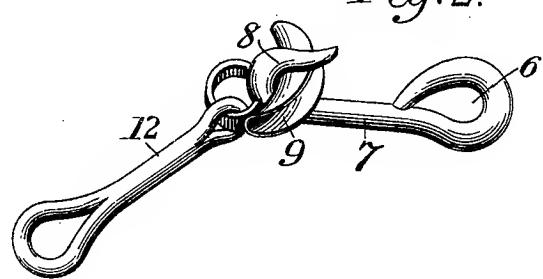


Fig. 2.

Witnesses:

D.W. Edelin.
Wm. Conner

Inventor

Clyde S. Wright
By Raymond attys

UNITED STATES PATENT OFFICE.

CLYDE S. WRIGHT, OF QUAKER CITY, OHIO.

ATTACHMENT FOR WELL-DRILLING MACHINES.

SPECIFICATION forming part of Letters Patent No. 600,189, dated March 8, 1898.

Application filed November 23, 1897. Serial No. 659,595. (No model.)

To all whom it may concern:

Be it known that I, CLYDE S. WRIGHT, a citizen of the United States, residing at Quaker City, in the county of Guernsey and State of Ohio, have invented certain new and useful Improvements in Attachments for Well-Drilling Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to what are known as "jerk-lines" for well-digging machines. As is well known to those familiar with well-drilling machines, at the commencement of the work of drilling the well, it is impossible to 15 operate the drill by means of the walking-beam, so that it is necessary to employ what is known as a "jerk-line"—that is, a rope secured to the wrist-pin of the crank-wheel of the driving-shaft, the other end being passed 20 around the drill-cable, forming a loop for the cable to pass through, so that as the crank-wheel is rotated the cable and drill will be alternately raised and lowered. The ordinary 25 constructions of these jerk-lines are defective in that the loop which passes around the cable is soon worn out, while the cable is also injured. Besides, too much time is consumed in hitching up and unhitching the jerk-line.

The object of my invention is to provide 30 an improved jerk-line whereby the above and other objections will be obviated; and it consists in the novel construction and combination of parts hereinafter fully described and claimed.

35 In the accompanying drawings, Figure 1 is an elevation of so much of a well-drilling machine as is necessary to illustrate my invention, showing my improved jerk-line connected therewith. Fig. 2 is a detail perspective view.

In the said drawings the reference-numeral 1 designates the framework or timbers of a well-drilling machine of any ordinary or suitable construction, and 2 a pulley at the upper end thereof, around which the drill rope or cable 3 passes. To one end of this cable the drill (not shown) is attached, while the other end is secured to a shaft journaled to the timbers of the framework.

40 The numeral 4 designates a driving-crank, to which is secured one end of a rope 5, the other end of which is connected with a loop

6 of a bar 7. The opposite end of this bar is formed with a hook 8, provided with a curved concavo-convex shoe 9, which rests against the drill-cable at 10. This bar is also formed with an eye, through which hook 12 passes, an eye being formed on opposite end of hook 12, to which bridle 13 is attached, said bridle also passing around the shaft 11, the opposite end being secured to the frame of the machine.

The operation will be readily understood. As the machine is operated the hook 6 as it is pulled outward by the crank and rope connected therewith will pull upon the run of the cable between the shaft and pulley and cause the drill to be elevated. Upon the opposite stroke of the crank the operation will be reversed and the drill dropped. The shoe 9 will prevent injury or wear of the cable.

A jerk-line constructed as above can be readily connected with and disconnected from the cable, thereby effecting a great saving in time over the ordinary jerk-lines now usually employed.

The invention can be used with all kinds and descriptions of well-drilling machines using jerk-lines, and, being very simple in construction, can be manufactured at a small cost.

Having thus fully described my invention, what I claim is—

1. In a well-drilling machine, the combination with the frame, the pulley and the drill-cable passing therewith, of the rope connected with the driving-crank, the hooked bar connected therewith, the hook at the other end of said bar and adapted to engage with said cable, the eye also formed with said bar, and the hook to which the bridle is attached connected therewith, substantially as described.

2. In a well-drilling machine, the combination with the frame, the driving-crank, the pulley, the cable passing therewith and the shaft around which one end of the cable is wound, of the rope connected with said crank, the bar having a loop or hook at one end with which said rope is connected, the hook and shoe at the opposite end of said bar embracing said cable, the eye also formed at said end of the bar, and the hook to which the bridle is attached connected therewith, said bridle passing around said shaft and se-

cured to the frame of the machine, substantially as described.

3. As an improved article of manufacture, the bar formed with the loop at one end and 5 the hook and eye, and the curved concavo-convex shoe at the other end substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

CLYDE S. WRIGHT.

Witnesses:

V. ADDISON,
C. E. GALLGHER.